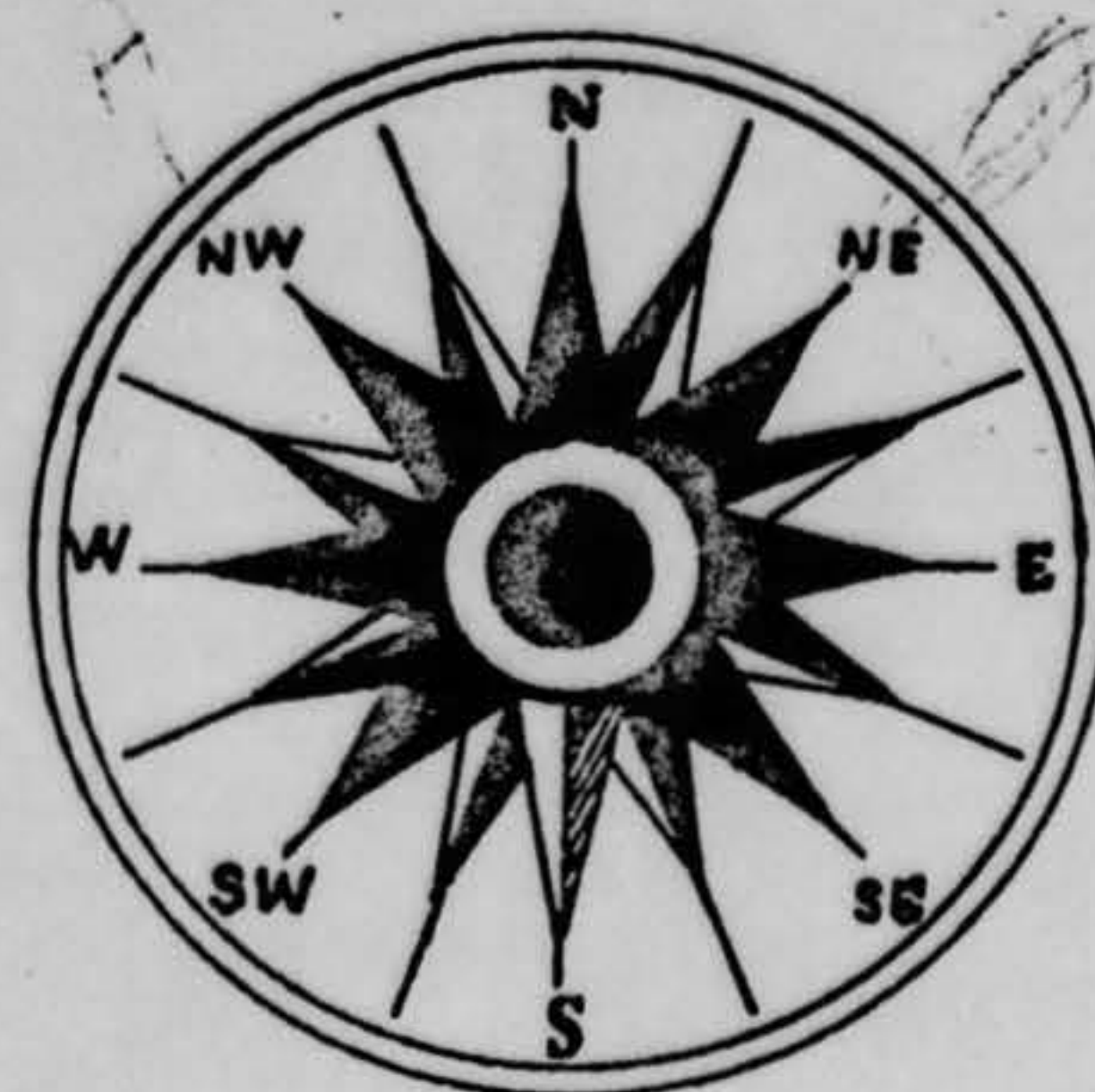
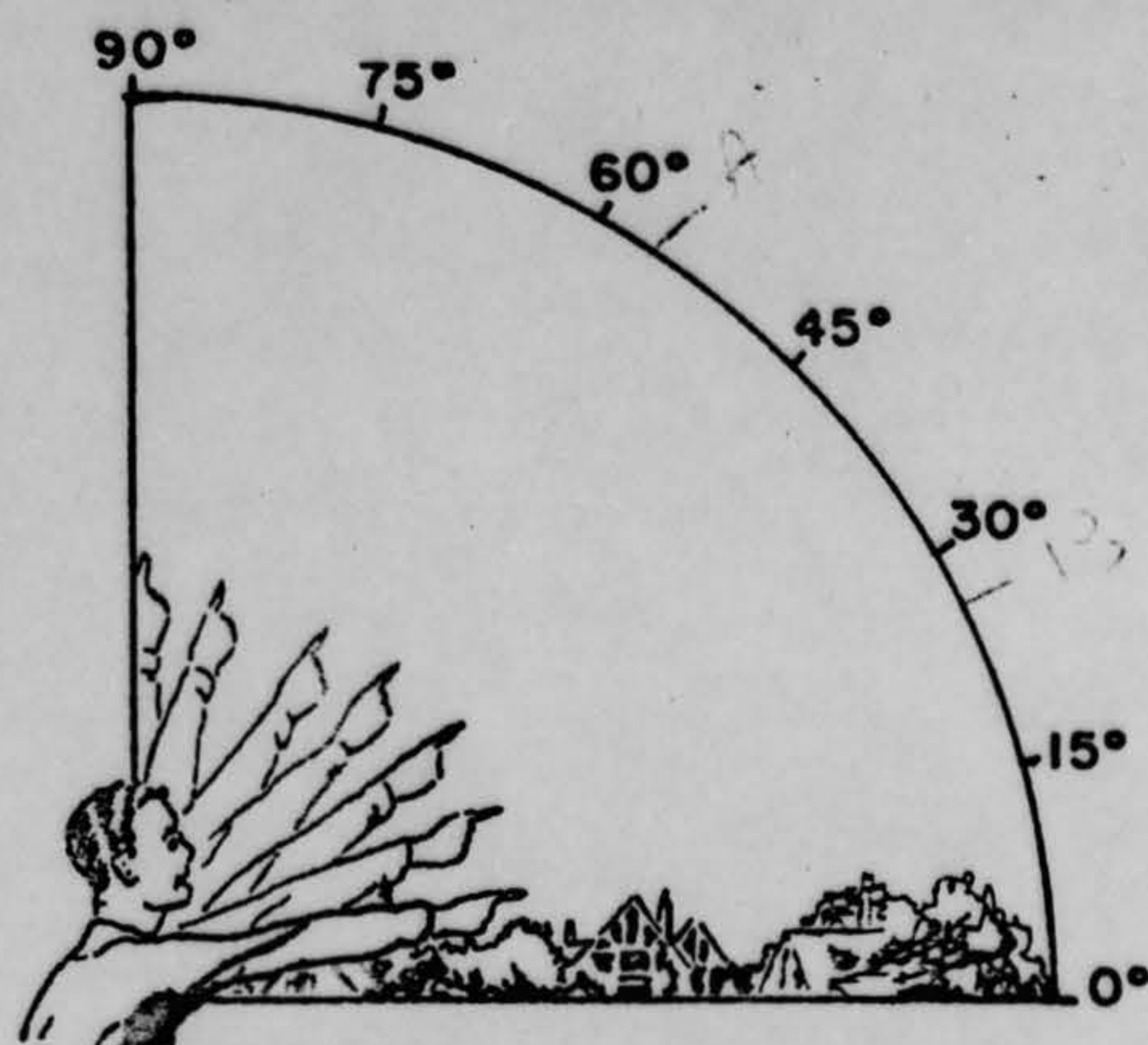


PROJECT 10073 RECORD

1. DATE TIME GROUP 17 Sept. 66 18/0050Z	2. LOCATION Michigan, Pennsylvania, Ohio multiple
3. SOURCE Civilian & Military	10. CONCLUSION Astro(meteor) ✓ <i>JM</i>
4. NUMBER OF OBJECTS One	
5. LENGTH OF OBSERVATION few seconds	11. BRIEF SUMMARY AND ANALYSIS
6. TYPE OF OBSERVATION Radar & Ground Visual	Many observers reported orange-yellow object of sufficient brilliance to light the area with a glow. One witness said that this was the largest meteor he has ever seen. Object started off as a ball, turned to a stream and dipped behind the horizon.
7. COURSE westward	
8. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
9. PHYSICAL EVIDENCE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

27. In the following sketch, imagine that you are at the point shown. Place an "A" on the curved line to show how high the object was above the horizon (skyline) when you *first* saw it. Place a "B" on the same curved line to show how high the object was above the horizon (skyline) when you *last* saw it. Place an "A" on the compass when you *first* saw it. Place a "B" on the compass where you *last* saw the object.



28. Draw a picture that will show the motion that the object or objects made. Place an "A" at the beginning of the path, a "B" at the end of the path, and show any changes in direction during the course.



29. IF there was MORE THAN ONE object, then how many were there? _____

Draw a picture of how they were arranged, and put an arrow to show the direction that they were traveling.

30. Have you ever seen this, or a similar object before. If so give date or dates and location.

31. Was anyone else with you at the time you saw the object? (Circle One) ☒ Yes ☐ No

31.1 IF you answered YES, did they see the object too? (Circle One) ☒ Yes ☐ No

31.2 Please list their names and addresses:

next to mine, I think I saw one of the same
 in a museum but I don't know where
 it was.

32. Please give the following information about yourself:

NAME

Last Name

First Name

Middle Name

ADDRESS

Street

City

Zone

State

TELEPHONE NUMBER

AGE

SEX

Indicate any additional information about yourself, including any special experience, which might be pertinent.

Compass CHARTING

33. When and to whom did you report that you had seen the object?

Day

Month

Year

Walter Green David State

34. Date you completed this questionnaire:

20 Sept 1976
Day Month Year

35. Information which you feel pertinent and which is not adequately covered in the specific points of the questionnaire or a narrative explanation of your sighting.

17 Sept 66 Michigan, Pa, Ohio

FTD (TDETR)
Wright-Patterson AFB, Ohio 45433
19 September 1966


[REDACTED]
[REDACTED]
Philadelphia, Pennsylvania 19115

Dear [REDACTED]

Reference your unidentified observation of 17 September 1966. The information which we have received is not sufficient for evaluation. Request you complete the attached FTD Form 164 and return it in the envelope provided.

We wish to thank you for reporting your observation to the Air Force.

Sincerely,

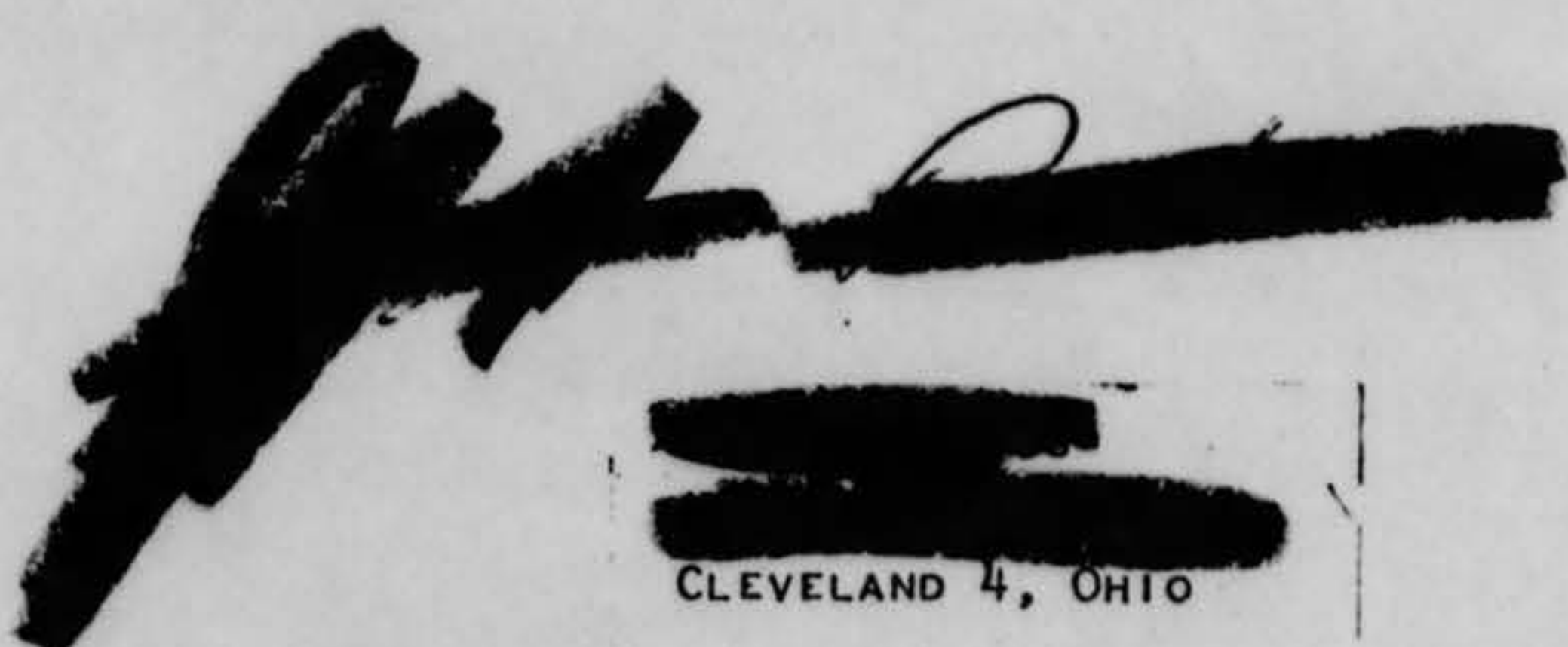


HECTOR QUINTANILLA, Jr, Major, USAF
Chief, Project Blue Book

SIR:

MAY I HAVE A COPY
OF THE ENCLOSED
QUESTIONNAIRE & ANSWER?

PS -

SEE ENCLOSED OUR SIGHTING OF
GIANT METEOR ON SEPT 17, 1966



CLEVELAND 4, OHIO

FLYING OBJECT
No II



SMOKE LIKE TRAIL

PASSED
SIGHT OUT OF
OVER HILL

HORIZON

SIGHTED FROM CAR.

BURTON, OHIO

ROAD - RT 87

MIDDLEFIELD, OHIO

E.D.T.

SEPT 17 8.45 P.M. VERY LARGE METEOR

SAW IT FROM CAR.

SAW

IT FROM BEGINNING TO END.

HE WAS

LOOKING AT SKY AT THE TIME

IT APPEARED.

ALMOST AS BRIGHT AS SUN,

CLEVELAND 4, OHIO

SEPT 25, 1961

FIREBALL REPORT

1. [REDACTED]
W-P AFB, Ohio
2. Between Yellow Springs & Clifton, Ohio in Clark County (in John Bryan Park, Boy Scout Camp) (39°47'30"N - 83°52'30"W)
3. 17 September 1966, approximately 2000 hours EST
- 4-5. Object seen in northern hemisphere traveling from the east to the west. Using Polaris as a reference, object traveling from the east did not quite reach Polaris but to about 10° of Polaris. Arc traveled was about 20° (ie, from 30° east to about 10° east)
6. Height of object, apparently traveling slightly downward noted to be 30° to 40° above the horizon.
7. Height did not change appreciably when object disappeared, about 10°.
- 8-9. It did not pass overhead, but was 30° to 40° above the horizon or 90°-30°=60° from zenith.
10. It did not reach the horizon. Horizon was clear since ahead were open fields and the camp is relatively flat to the north from point of observation.
11. The flight path angle is estimated at 10° to the horizon.
12. The low angle of observation can only be related to Polaris as noted.
13. No explosion.
14. Flight duration - approximately four seconds
15. No train was left, or at least noted. The brilliance of the basic body glow was so great that a small trail would not be noticeable. After glow disappeared nothing was noted in the sky as remains or debris.
16. None noted.
17. No sound.
18. Color orange-yellow, of sufficient brilliance to light the area with a glow.
19. The largest ever observed. Other meteors noted to be the size of walnuts, this appeared to be about the size of a small grapefruit held at five feet. The moon, by the same comparison, would be about 2 - 4 times larger.

20. Only one body was seen, no explosion.

21. Sky was very clear.

22. Mr. [REDACTED]
[REDACTED]
Medway, Ohio 45341

Also, about 17 boy scouts.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS FOREIGN TECHNOLOGY DIVISION (AFSC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433



REPLY TO
ATTN OF:

TDEER/V. D. Bryant/mjb/70401/6 Oct 66

SUBJECT:

Evaluation of 17 September 66 UFO Sighting

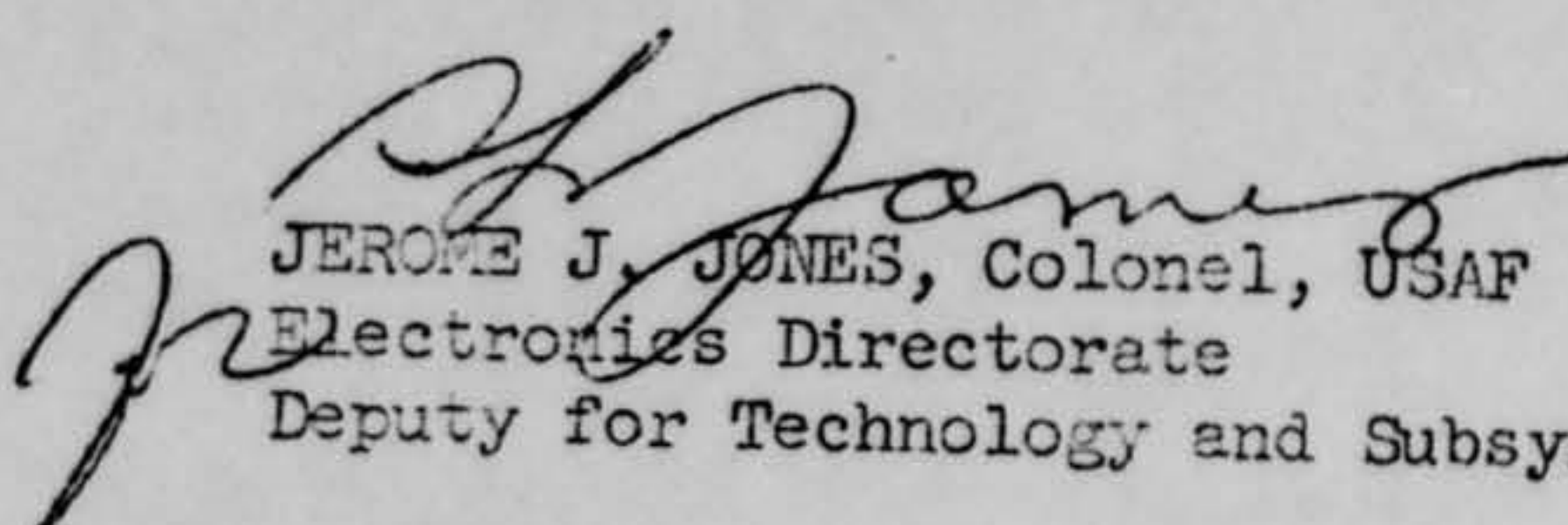
12 OCT 1966

TO:

TDETR

1. There is insufficient information pertaining to the radar sighting to allow a detailed evaluation to be made. However, in view of the fact that the time of this sighting (which appears to be an approximation) is given as 0100Z, and the large meteor sighting in the Michigan area (seen in a number of northeastern states) occurred at 0045Z, a logical assumption can be made that the two occurrences are one and the same.

2. Many articles have been written confirming the fact that missiles, meteors, etc., frequently leave an ionized path or wake which has a very large radar echo area, and hence would provide a sizeable radar return. This ionized cloud may have been the target(s) which were seen to rise from 75000 to 85000 ft. on the height finder.


JEROME J. JONES, Colonel, USAF
Electronics Directorate
Deputy for Technology and Subsystems

FTD WORK ORDER

1. Description of Work: (Include title of unscheduled tasks.)

TITLE: UFO REPORT (RADAR) 18 SEP 66, MICHIGAN

Request analysis as to the probable cause of the unidentified radar returns.

- a. Extensive Analysis
- b. Broad
- c. None
- d. 3rd
- e. 10 hrs

See the attached unclassified message from Sault Ste Marie AFS, Michigan 753-00P 09649/66, subject: UFO. Additional information on radar will follow under separate cover.

-FROM-

2. FTD W.O.No.	601021201
3. Monitor	Maj H Quintanilla, Jr.
4. Phones	70916/76678
5. DIA Task No.	t65-01-59
6. DIA Priority	6A
7. Date Needed	3 Oct 66
8. Consequence Code	A
9. Classification of Sources	All Source
10. Classification of End Product	Unclassified
11. PPTD or Dep Sig.	<i>Frederick B. Davis</i>

18. Div. Chiefs Instructions / Modification or Expansion of Work Description

-TO-

12. Div./Dir. Symbol	TDEER
13. M-H Estimate	
14. Monitor	
15. Phones	
16. Div. Precedence	
17. Div. Chief/Dir. Sig.	

17 Sept. 1966
American Meteor Society Report
1967

THE GREAT FIREBALL of 1966 SEPTEMBER 17 A.M.S. No. 2391

On this date a remarkable fireball or bolide appeared at about 7:52 p.m., E.S.T. It was seen from as far west as Wisconsin, east for many places in New York, Pennsylvania and Canada, and the light of the explosion(?) as far south as Roanoke, Va., though from there the body was below the horizon. Its brilliancy was excessively great and it left a long enduring train visible from considerable distances.

One of our very active A.M.S. members, Wm. Werner, Wooster, Ohio, observed it and at once began gathering reports. Later reports from Sky and Telescope, Wright-Patterson A.F.B., Adler Planetarium, and other institutions, as well as from many individuals, arrived. To all who reported we are most grateful. Perhaps the total was 70. At first glance, it appeared that for once almost a perfect solution could be obtained, as a number plotted the path on A.M.S. charts and others drew diagrams with respect to stars. However, when the azimuth lines were plotted on the usual regional chart for beginning point and for end point, immediately it appeared that there were serious errors in some reports. The fact that it was not fully dark in most areas made plotting difficult. To be brief, during the following months, no less than four complete diagrams were prepared and much work done on solutions which further data and study proved incorrect. The solution here given is the best that the writer can derive from the data in his hands. Four Canadian reports came, one only giving usable data for both beginning and end heights. As the body began over southwestern Ontario, this lack of more complete reports was serious. Had all the plotted paths been correct, even approximately, when replotted on a single chart, their projections would have given the radiant. With this derived, the rest would have been much easier. But the many plots did not give even an approximate radiant. Hence the solution had to depend entirely on reported azimuths and altitudes. Eventually the most probable sub-beginning point and sub-end point were fixed. Next the observed altitudes, corrected for curvature, gave a series of heights for the beginning and end points. It is notorious that most observers tend to overestimate altitudes for 30° or over. Hence those of 35° or more are practically useless, so discarding a few such altitudes, the beginning height was 141 ± 27 km., end height 44 ± 21 km. In addition, there were 9 points scattered along the path, mostly about midway, which very roughly gave 84 km. This probably is the point at which the fireball flared to greatest brilliancy. The projected path was 204 km long, the true path 226 km. The fireball was very brilliant. The mean of 8 numerical estimates is -14; another said brighter than midday Sun, one brighter than full Moon, several that landscape was bright as day, others that shadows were cast. For what it is worth, the mean of 14 estimates of diameter is 18'; others merely state it had a disk. A long-enduring train is mentioned by 24. The duration given is very variable, the longest being 20 to 30 minutes, and apparent length 30°. It was probably orange in color. The observers when writing their reports evidently had great difficulty in separating color of fireball from that of train. For those not affected by great atmospheric absorption it was blue-white, but at explosion or flareup a decided green. As said, this latter was so intense as to be seen low in northern sky from southwestern Virginia. It is a pity nobody reported the drift of the train. The duration of flight, leaving out 5 estimates of under 2 sec., but based on 36 others from 2 sec. to one of 15 sec. was 5.35 ± 2.77 sec. Hence observed velocity was 42.3 km/sec or corrected for Earth's attraction 40.8 km/sec. As in this case the heliocentric velocity is greater than the geocentric, we could conclude that the orbit was hyperbolic. Due, however, to the large probable error in the duration, only the parabolic orbit is calculated. As to whether there was an actual explosion, about an equal number replied yes and no. Explosion or not, at some distance from beginning point there was a sudden great increase in brilliancy. Numerical data and elements of the parabolic orbit follow:

Date.....1966 Sept. 17.52 G.M.T.
Sidereal time at end point.....285° 17'
Began over..... $\lambda = 80^\circ 41' W$, $\phi = 43^\circ 08' N$ at 141 ± 47 km

206

UNCLASSIFIED

PRIORITY

0150 04 21

3 FETW

FTP

PFTO JAG RUEOYXEC762 2610425-UNNU--RUEDFIA.

DE RUEOYXEC 2 2610285

ZNR 00000

P 160230Z SEP 66

FM SAULT STE MARIE AFB, MICHIGAN

TO RUEOYXEC/DEFENSE COMMAND ENT AFB, COLORADO

RUEOYXEC/27TH AIR DIV GULPH INTL ARPT, MINN

RUEOYXEC/AIR FORCE SYSTEMS COMMAND FOREIGN TECHNOLOGY DIVISION WPAFB

RUEOYXEC/HEADQUARTERS, USAF (AFAIN) WASHINGTON 25, D.C.

RUEOYXEC/SECRETARY OF THE AIR FORCE (SAFOI) WASHINGTON 25, D.C.

BT

UNCLAS733-DCP 09849/66. FOR OIN, DUOLM,

FOREIGN TECHNOLOGY DIVISION, AFNIN, SAFOI. SUBJECT: UFO

A. (1) ELLIPTICAL

(2) SIZE OF BASKETBALL AT ARMS LENGTH

(3) MULTI COLOR PALE YELLOW, PALE GREEN, PALE PINK, PALE
GRAY.

PAGE TWO RUEOYXEC 2 2610285

UNCLASSIFIED

PRIORITY

ite Lights Sky N.Y. to Illinois

Romney Thought He Was Attacked

A meteorite lightened skies over much of the eastern part of the nation tonight, and a flaming chunk fell off and dropped into a soybean field near Marion, Ind.

The meteorite prompted floods of telephone calls to police as it streaked across skies from New York to Illinois. There were reports it fell to earth in rough country near Huntsville, Ont.

Michigan Gov. George Romney, who was flying in his private plane to St. Clair, Mich., said the meteorite came close to his craft and lighted the sky as "bright as noon."

"We thought we were under attack," Romney said.

Hundreds of people throughout the northern part of the Miami valley flooded the switchboards of newspaper offices and police and sheriff's departments with calls that they had seen a bright object in the northeast skies.

"IT WAS a tremendous thing," said George Otto, 2168 Finland Dr., Dayton. "I thought it may have been a nose cone and I was ready to duck."

Otto described the object as green then fading out into yellow.

"I've seen a lot of meteors," said another caller, "but I've never seen anything like that before."

JOSEPH MOORE, 142 Ebony Lane, said he was driving east on Patterson Rd. when he saw something "light up and fall at about a 45-degree angle. It had a tail about 1,000 feet long. At first it was greenish blue, then turned to a greenish red and finally was all red and orange when it disappeared."

The object was sighted around 7:45 p.m. Many callers said they thought a plane had crashed.

Men from Wright-Patterson Air Force base were detailed to search some of the counties to the north after reports that fragments may have landed.

THE CHAMPAIGN county sheriff's office reported that a meteor was believed to have landed in the area of Kaiser Lake Rd. But a search of the area disclosed nothing but a dump on fire.

The local weather bureau

said they had no information on the object.

"From its height and the distance it covered, it appears to be a meteor," said the U.S. Weather bureau observer at the Greater Pittsburgh airport.

AIR FORCE officers at Wright-Patterson Air Force base said they had received several calls from area residents about the object but declined to say where they believed it originated.

The FAA said the bright light was seen by several airline pilots.

Burning fragments plunked down in a farm field near the tiny town of Sweester, Ind., where witnesses said they burned several minutes before flickering out.

ONE REPORT said the fragments "were big as a house."

In Caro, Mich., a deputy sheriff said "We've had reports from all over the area about small fires on the ground, explosions on the ground and over the lake and pieces and lights raining down."

In Chicago, the chief meteorologist at the Adler planetarium described the incident as a bolide or exploding meteor.

PIECES of the object fell the Wayne Glasburn farm near Sweester. A number of smoldering chunks were within 20 feet of each other, eye witnesses reported. They were described as about 1½ feet in circumference.

In Canada, the provincial police reported an object fell to the ground near Huntsville, Ont., about 100 miles east of Toronto.

Today's Chuckle

It's said that Man cannot live by bread alone. Maybe so, but have you noticed how many seem to be getting by on crust?

Meteorite Lights Sky From N.Y. to Illinois

Romney Thought He Was Attacked

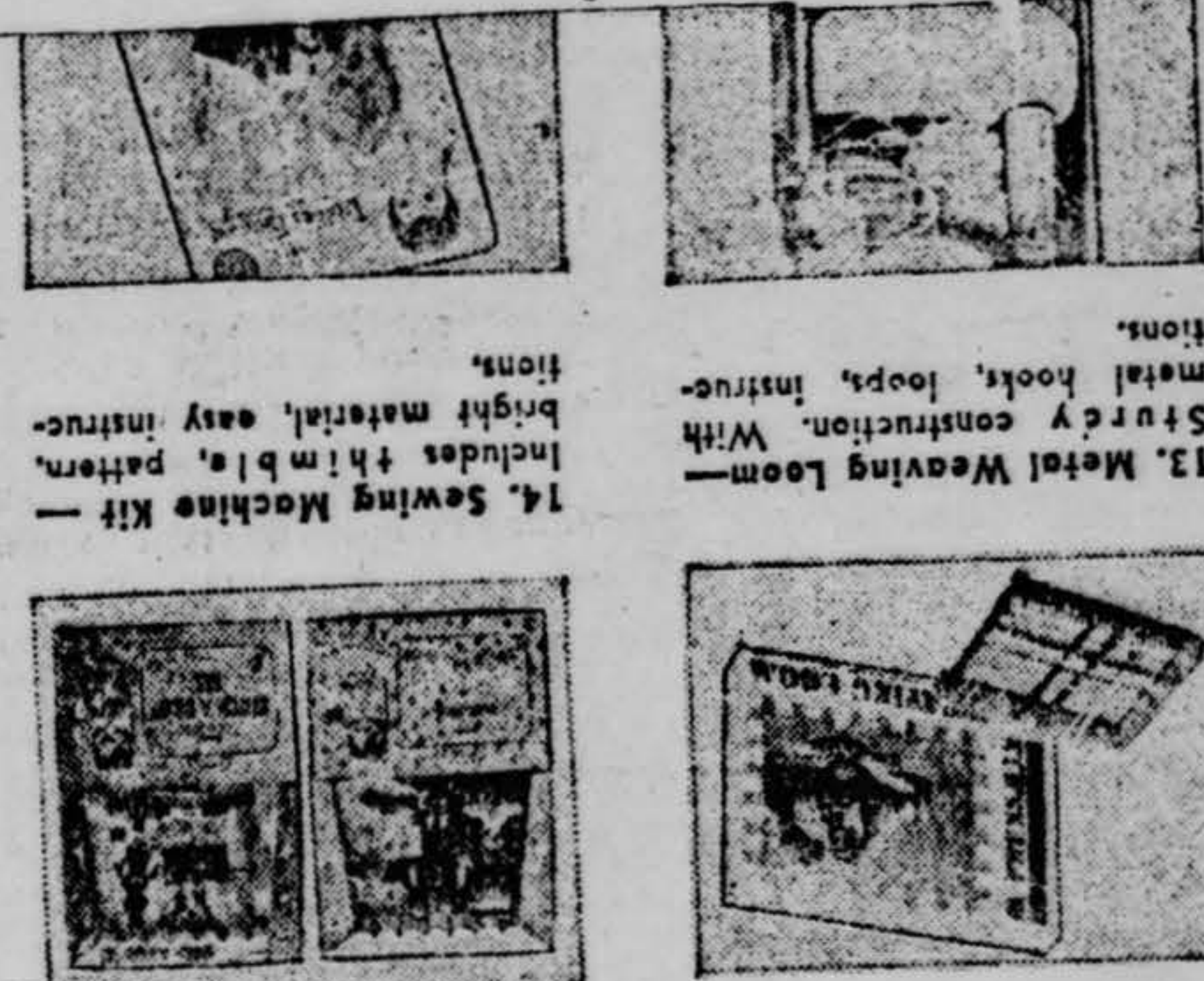
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SMITHSONIAN INVESTIGATING

DAYTON DAILY NEWS
19 Sept 66

Did Meteorite Fall Here?

By WALTER RYBECK

The Daily News Bureau
647 National Press Bldg.

WASHINGTON, Sept. 19—This week end, before a spectacular fireball identified as an exploding meteorite flashed across the eastern United States, including southwest Ohio, a Smithsonian Institution meteorologist was trying to unravel the mystery of a meteorite that allegedly fell on Dayton in 1892 or 1893.

E. P. Henderson, a research associate in the division of meteorology is skeptical that, as reported to the Smithsonian, the specimen fell on the Montgomery county fairgrounds with such force that it penetrated the ground about four feet and was still hot when recovered.

"Even 75 years ago, Dayton was a flourishing city, so that you would expect news of such a fall to have found its way into scientific literature," Henderson said.

"I DO NOT QUESTION the integrity of L. R. Keyser who, as a University of Cincinnati student in 1951, sent us the iron. He probably reported the

story as passed down through the years by his family," Henderson said.

Because the specimen "definitely is a meteorite, a unique one, a scientifically very important sample," Henderson is especially anxious to nail down the facts of its origin.

He was delighted to learn, through The Daily News, that E. J. Koestner, director of the Dayton Museum of Natural History, has agreed to help the Smithsonian try to get an accurate account of the meteorite—a 58-pound hunk of iron, triangular in shape, about 12 inches in its longest dimension.

ASSOCIATE CURATOR of Meteorology Roy Clarke and Henderson said unusual features include a fairly high nickel content and unusual crystal structure. Tests have shown it contained gases known to be cosmic in origin.

Koestner said his staff will check Dayton newspapers of the 1880s and 1890s and talk with astronomers and old-timers who might recall a meteorite fall of that era.

Henderson has added zest in deciphering the scientific puzzle because he is an Ohioan, born near Columbus in 1898. Although he recently retired, officially, Clarke said Henderson still works as actively as ever, and was called on to explain Saturday night's phenomenon.

CLARKE SAID no reports of meteorite falls—mostly in Indiana—have yet to be substantiated, although the fireball explosion was "the kind of event that does produce specimens."

The interest in meteorites has grown tremendously because of new strides in space. This could account for the fact that the Smithsonian is just getting around to verifying the "fairground" specimen, plus the tremendous numbers awaiting study.

Until recently, Henderson was the only scientist at the Smithsonian working on meteorites and he had other duties as well. Now there are curators, chemists, electronic engineers, geologists and others concentrating on this field.

UNCLASSIFIED

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE

AF IN: 22666 (14 Sep 66) R/fdb

Page 1 of 3

ACTION: RDC-4 INFO: XOP-1, XOPX-2, SAFOS-3, NIN-7, DIA/JCS-1 (19) ADV CY DIA

SMB A244CZCBVB788

PTTU JAW RUEDGMA2985 2571825-UUUU--RUEDHQA.

ZNR UUUUU

P 141519Z

FM 52FTWG SUFFOLK COUNTY AFB NY

TO RUEDHQA/CSAF

RUEDHQA/SECRETARY OF THE AF WASH DC

RUWMFVA/ADC

RUEDMAA/1AF STEWART AFB NY

RUEDBOA/21AIRDIV MCGUIRE AFB NY

RUEDFIF/HQ FTD AFSC WRIGHT PATTERSON AFB OHIO

BT

UNCLAS 52ODC 00212 SEP 66

FOR USAF (AFNIN), 21AIRDIV (21ADOIN). UFO RPT. IAW AFR

200-2 INFO SUBMITTED ON 6 UFO SIGHTINGS BETWEEN 2300 -

2400Z, 9 SEP 66. INFO IN ALL SIX RPTS MATCHES: ALL

CONSOLIDATED FOR THIS RPT. UFO IDENTIFIED AS BALLOON,

ORIGIN UNKNOWN.

A. (1) ROUND (2) DIME (3) WHITE (4) ONE (5) NONE (6) NONE

(7) NONE (8) NONE (9) NONE

To	Cy
CS	
OSA	
US	
USI	
USM	
IL	
ILP	
ILM	
ILS	
ILT	
FM	
RD	
AA	
GC	
OI	
LL	
SS	
SL	

AFHQ FORM
JAN 65 0-309C

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DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE

AF IN: 22666 (14 Sep 66)

Page 2 of 3

B. (1) HAPPENED TO SEE IT (2) 450-90 DEGREES - AZIMUTH NOT GIVEN
(3) OBJECT LINGERED (4) OBJECT FLOATED (5) SLIGHTLY MOVING

PAGE 2 RUEDGMA2985 UNCLAS

DURING OBSERVERS' SIGHTING TIME (6) DURING TOTAL TIME OF
SIGHTING.

C. (1) GROUND-VISUAL (2) NONE (3) N/A.

D. (1) 2300Z-2400Z, 9 SEP 66 (2) DUSK

E. VARIOUS COMMUNITIES IN SUFFOLK COUNTY, L.I., NY

F. (1) NAMES & ADDRESSES OF 7 WITNESSES: MRS [REDACTED]

[REDACTED] AVE, RIVERHEAD, PH: [REDACTED] MR [REDACTED]

[REDACTED] AVE, RIVERHEAD [REDACTED] CENTER

MORTICHES, PH: [REDACTED] RIVERHEAD, PH: [REDACTED]

[REDACTED] AVE, RIVERHEAD, PH: [REDACTED]

G. (L) SCATTERED CLOUDS (2)	WIND	VEL IN KNOTS
SURFACE	230	4
6,000	020	20
10,000	020	30
16,000	060	25
20,000	030	35

AFHQ FORM 0-309C
JAN 65

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE

AF IN: 22666 (14 Sep 66)

Page 3 of 3

30,000	060	35
40,000	340	5
50,000	300	5

PAGE 3 RUEDGMA2985 UNCLAS

(3) 8,000 BROKEN (4) 15 MILES (5) OVERCAST (6) NONE (7) UNKNOWN

H. TROPOPAUSE AT 34,500 FT

I. NO INTERCEPTION ACTION TAKEN BECAUSE GCA AND THE CAC
IDENTIFIED OBJECT AS A BALLOON.

J. NO INFO GIVEN.

K. LT. W. D. CAMPBELL, ASST INTER OFF. SEEING THAT ALL 7 RPTS
GAVE THE SAME DATA AND GCA VERIFIED OBJECT AS A BALLOON, IDENTIFICATION SEEMS POSITIVE.

L. NONE

BT

NNNN

UNCLASSIFIED

SRP

SAULT STE MARIE, MICH
01 18/0100Z

UNCLASSIFIED

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE

AF IN: 30158 (18 Sep 66) F/udl

Pg 1 of 4

ACTION: RDC-4 INFO: XOP-1, XOPX-2, ~~SAFOS-3~~, NIN-7, JCS/DIA-1 (19)
ADV CY DIA

SMB A033VC964

PFTU JAW RUEDYXE0762 2610425-0000--RUEDHQA.

DE RUCDDUB 2 2610250

ZNR 00000

P 180230Z SEP 66

FM SAULT STE MARIE AFS, MICHIGAN

TO RUWMFUA/AIRDEFENSE COMMAND ENT AFB, COLORADO

RUCDDU/29TH AIR DIV DULUTH INTL ARPT, MINN

RUEDFIA/AIR FORCE SYSTEMS COMMAND FOREIGN TECHNOLOGY DIVISION WPAFB

RUEDHQA/HEADQUARTERS, USAF (AFNIN) WASHINGTON 25, D.C.

RUEDHQA/SECRETARY OF THE AIR FORCE (SAFOI) WASHINGTON 25, D.C.

BT

UNCLAS753-00P 09649/66. FOR CIN, DUOIN,

FOREIGN TECHNOLOGY DIVISION, AFNIN, SAFOI. SUBJECT: UFO

A. (1) ELIPTICAL

(2) SIZE OF BASKETBALL AT ARMS LENGTH

(3) MULTI COLOR PALE YELLOW, PALE GREEN, PALE PINK, PALE
GRAY.

PAGE TWO RUCDDUB 2 UNCLAS

(4) ONE

AFHQ FORM
JAN 65 0-309C

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE

AF IN: 30158 (18 Sep 66)

Pg 2 of 4

(5) N/A

(6) SHAPE ELIPTICAL

(7) NONE

(8) NONE

(9) BRIGHT LIGHTS IN AREA OF SIGHTING PRIOR TO INITIAL
SIGHTING OF U.F.C.

B. (1) BRIGHT LIGHT

(2) LOW SE ABOVE TREE TOPS

(3) LOW WSW

(4) STRAIGHT LINE

(5) INSTANTANEOUSLY WSW

(6) 2 TO 5 SECONDS

C. (1) GROUND VISUAL, AND GROUND ELECTRONICS, RADAR "L" BAND
LONG RANGE HEIGHT FINDER AN/FPS-90 ASMITH RANGE AND
ALTITUDE AVAILABLE ON REQUEST.

(2) NO OPTICAL AIDS

(3) NOT APPLICABLE

D. (1) 0100 18 SEP

(2) NIGHT

PAGE THREE RUCDDUB 2 UNCLAS

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE

AF IN: 30158 (18 Sep 66)

Pg 3 of 4

E. (1) 753 RADAR SQUADRON AREA SAULT STE MARIE, MICHIGAN

F. (1) N/A

(2) NORMAN E. SKILES STAFF SGT 753D RADAR SQUADRON, MOTOR
POOL NCOIC, RELIABLE CHARACTER, JERRY K. SCUNNINGHAM
MASTER SGT, MATERIEL CONTROL NCOIC, RELIABLE CHARACTER

G. (1) CALM, CLEAR

(2) SURFACE 340 5

6000 280 7

10000 310 10

16000 300 17

20000 280 13

30000 340 8

50000 280 36

80000 270 7

H. (1) NONE

I. (1) NOT APPLICABLE

J. (1) NOT APPLICABLE

K. (1) CAPT STANLEY F FROCK, COMMANDER 753D RADAR. THE RESULTS
OF THE PRELIMINARY ANALYSIS LEADS TO NO CONCLUSION AS TO
POSSIBLE CAUSE. SIGHTING WERE NOTED AT KINCHELOE AFB,

UNCLASSIFIED

Ended over	$\lambda = 83^{\circ} 13' \text{ W}, \varnothing = 43^{\circ} 40' \text{ N at } 44 \pm 21 \text{ km}$	
Projected path	204 km	
Path	226 km	
Observed velocity	42.3 km/sec	
Uncorrected radiant	$a = 285^{\circ},$	$h = +26^{\circ}$
Radiant corrected for curvature and zenith attraction	$a = 285^{\circ},$	$h = +23.1^{\circ}$
	$\alpha = 348^{\circ}.5,$	$\delta = 5^{\circ}.6$
	$\lambda = 351^{\circ}.7,$	$\beta = +9^{\circ}.7$
Parabolic orbit	$i = 6^{\circ}.4, \Omega = 174^{\circ}.4, \pi = 290^{\circ}.9, q = 0.73 \text{ A.U.}$	

A search in the Hoffmeister-von Niessl Catalogue gives several fireballs of about same date and similar radiants. These are:

No.	Date	Star	R.A.	Decl.
No. 338	1899 Sept. 8	greater V	347	+3
345	1875 Sept. 14	great	348	0 \pm 2
346a	1901 Sept. 14	greater V	345	+1
361b	1865 Sept. 24	greater J	347	+3
371	1900 Sept. 27	greater V	354.5	+6.5
372	1906 Sept. 27	greater J	345	+2
575	1914 Sept. 8	3 x V	347	+3

When we remember that probably not one fireball in a hundred has its orbit computed, it is reasonable to conclude that there is a stream of meteoroids furnishing fireballs whose radiants lie near the celestial equator and 5° to 15° west of vernal equinox. Evidently the radiant of the 1966 fireball fits in quite well.

It is understood that Prof. V. D. Chamberlain, Abrams Planetarium, East Lansing, Mich., will publish a paper on this fireball based upon very extensive data from presumably different reports.

FIREBALL of 1967 April 5.52 G.M.T.
A.M.S. No. 2392

This brilliant fireball appeared on the above date at 7:34 p.m., E.S.T. It seems to have started about 10 miles S.W. of Rochester, N.Y. and ended above a point very near Barrie, Ontario. It is believed that the sub-end point is quite accurate, the sub-beginning less certain. The solution depends on 8 reports from this side and 24 reports from Canadian side. All but one of the first lot were sent me by H. E. Roth, Project Director, Volunteer Flight Officer Network, National Air lines, and the 24 Canadian by Bruce A. McIntosh, National Research Council, Ottawa, Canada. But for the invaluable help of both, no solution would be possible. We received only one report from a ground observer in New York, and two thirds of the Canadian were from Ottawa or near by. The reports from airline pilots fortunately were from widely scattered points.

The fireball was very brilliant and observers were almost unanimous in giving its color as green. Venus was near its end point for most Canadian observers and most state that the fireball was far brighter. Also two say that it was brighter than Moon one that it was equal, one that its magnitude lay between that of Moon and Venus. Probably about -10 would be near the truth. No long-enduring train was left. Both Venus and Belt of Orion served as reference points for a few observers. Even after discarding altitude estimates of 45° and over as being obviously impossibly great, there is wide range in the calculated heights of beginning and end points. Retaining estimates less than 45° , H1 is 121 km, H2 81 km, based upon 7 and 14 reports respectively. The observed duration, based on 18 estimates, is 5.64 ± 2.13 seconds. As path length was 226 km the velocity is 41 km/sec. This indicates a hyperbolic orbit, but due to the large average error in duration, it seems needless to calculate this. Hence the usual parabolic orbit only is given. The Ottawa reports give only a small slope which is borne out by the calculated data. Due to the great height of H2 the chances of finding meteorites is small.

UNCLASSIFIED

**DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
INCOMING MESSAGE**

AF IN: 30158 (18 Sep 66)

Pg 4 of 4

PAGE FOUR RUCDDUB 2 UNCLAS

MICHIGAN, 37TH AD MISSILE SQUADRON AT RAGO MICHIGAN, AND
SAULT STE MARIE MICHIGAN AND SAULT STE MARIE ONTARIO. THIS
INFORMATION PLUS POSSIBLE ELECTRONIC DETECTION INDICATES POSSIBLE
U.F.O. SIGHTING.

L. NONE

BT

NNNN

UNCLASSIFIED

19 Sept, 66

Contact with the SPADATS revealed that there was a decay ^{about} at 0030Z 18 Sept. 66. The decay was from a US rocket body with a classified payload. Capt. Kuns does not believe that the meteor sighting and the sat. decay were one and the same. Capt. Kuns will forward us the final decay trajectory when he received that information.

Contact with Dr. Geddes of the Moonwatch team. He had not received any information of the meteor as of yet. He will forward any such information when he received such.

21 Sept.

Contact was made with Lt. Needom, SPADATS concerning Object # 2423. This object apparently decayed at 0644Z 18 Sept. 66. Estimated decay location is 63N 141W. *Eastern Alaska*

U.S. AIR FORCE TECHNICAL INFORMATION

This questionnaire has been prepared so that you can give the U.S. Air Force as much information as possible concerning the unidentified aerial phenomenon that you have observed. Please try to answer as many questions as you possibly can. The information that you give will be used for research purposes. Your name will not be used in connection with any statements, conclusions, or publications without your permission. We request this personal information so that if it is deemed necessary, we may contact you for further details.

1. When did you see the object?

17 Sept. 65
Day Month Year

2. Time of day: _____

Hour

Minutes

(Circle One):

A.M.

or

P.M.

3. Time Zone:

(Circle One):

a. Eastern

b. Central

c. Mountain

d. Pacific


e. Other _____

(Circle One):

a. Daylight Saving

b. Standard

4. Where were you when you saw the object?

 Nearest Postal Address

PHILD. City or Town

KODAK State or County

5. How long was object in sight? (Total Duration)

Hours

Minutes

1 3/4 Seconds

a. Certain

b. Fairly certain

c. Not very sure

d. Just a guess

5.1 How was time in sight determined? _____

5.2 Was object in sight continuously?

Yes ☒

No _____

6. What was the condition of the sky?

DAY

a. Bright

b. Cloudy

NIGHT

a. Bright

b. Cloudy

7. IF you saw the object during DAYLIGHT, where was the SUN located as you looked at the object?

(Circle One):

a. In front of you

b. In back of you

c. To your right

d. To your left

e. Overhead

f. Don't remember

8. IF you saw the object at NIGHT, what did you notice concerning the STARS and MOON?

8.1 STARS (Circle One):

- a. None
- b. A few
- c. Many
- d. Don't remember

8.2 MOON (Circle One):

- a. Bright moonlight
- b. Dull moonlight
- c. No moonlight - pitch dark
- d. Don't remember

9. What were the weather conditions at the time you saw the object?

CLOUDS (Circle One):

- a. Clear sky
- b. Hazy
- c. Scattered clouds
- d. Thick or heavy clouds

WEATHER (Circle One):

- a. Dry
- b. Fog, mist, or light rain
- c. Moderate or heavy rain
- d. Snow
- e. Don't remember

10. The object appeared: (Circle One):

- a. Solid
- b. Transparent
- c. Vapor
- d. As a light
- e. Don't remember

11. If it appeared as a light, was it brighter than the brightest stars? (Circle One):

- a. Brighter
- b. Dimmer
- c. About the same
- d. Don't know

11.1 Compare brightness to some common object:

12. The edges of the object were:

- (Circle One):
- a. Fuzzy or blurred
 - b. Like a bright star
 - c. Sharply outlined
 - d. Don't remember

e. Other _____

13. Did the object:

(Circle One for each question)

- | | | | |
|---|-----|----|------------|
| a. Appear to stand still at any time? | Yes | No | Don't know |
| b. Suddenly speed up and rush away at any time? | Yes | No | Don't know |
| c. Break up into parts or explode? | Yes | No | Don't know |
| d. Give off smoke? | Yes | No | Don't know |
| e. Change brightness? | Yes | No | Don't know |
| f. Change shape? | Yes | No | Don't know |
| g. Flash or flicker? | Yes | No | Don't know |
| h. Disappear and reappear? | Yes | No | Don't know |

File with
Case

TDEER/V. D. Bryant/mjb/70401/6 Oct 66

Evaluation of 17 September 66 UFO Sighting

12 OCT 1966

TDETR

1. There is insufficient information pertaining to the radar sighting to allow a detailed evaluation to be made. However, in view of the fact that the time of this sighting (which appears to be an approximation) is given as 0100Z, and the large meteor sighting in the Michigan area (seen in a number of northeastern states) occurred at 0045Z, a logical assumption can be made that the two occurrences are one and the same.
2. Many articles have been written confirming the fact that missiles, meteors, etc., frequently leave an ionized path or wake which has a very large radar echo area, and hence would provide a sizeable radar return. This ionized cloud may have been the target(s) which were seen to rise from 75000 to 85000 ft. on the height finder.

JEROME J. JONES, Colonel, USAF
Electronics Directorate
Deputy for Technology and Subsystems

17 Sep 66

(Meteor)



file - regular

case

14. Did the object disappear while you were watching it? If so, how?

It started off as a small, round, brown object and disappeared behind the horizon.

15. Did the object move behind something at any time, particularly a cloud?

(Circle One): Yes ☐ No ☒ Don't Know. IF you answered YES, then tell what it moved behind: _____

16. Did the object move in front of something at any time, particularly a cloud?

(Circle One): Yes ☐ No ☒ Don't Know. IF you answered YES, then tell what in front of: _____

17. Tell in a few words the following things about the object:

a. Sound None detectable

b. Color Bright red

18. We wish to know the angular size. Hold a match stick at arm's length in line with a known object and note how much of the object is covered by the head of the match. If you had performed this experiment at the time of the sighting, how much of the object would have been covered by the match head?

19. Draw a picture that will show the shape of the object or objects. Label and include in your sketch any details of the object that you saw such as wings, protrusions, etc., and especially exhaust trails or vapor trails. Place an arrow beside the drawing to show the direction the object was moving.

C - STARTED
 ——— Followed
 ↓
 E - Dipped behind horizon

20. Do you think you can estimate the speed of the object?

(Circle One) Yes No

IF you answered YES, then what speed would you estimate? 100 mph

21. Do you think you can estimate how far away from you the object was?

(Circle One) Yes No

IF you answered YES, then how far away would you say it was? _____

22. Where were you located when you saw the object?

(Circle One):

- a. Inside a building
- b. In a car
- c. Outdoors
- d. In an airplane (type)
- e. At sea
- f. Other _____

23. Were you (Circle One)

- a. In the business section of a city?
- b. In the residential section of a city?
- c. In open countryside?
- d. Near an airfield?
- e. Flying over a city?
- f. Flying over open country?
- g. Other _____

24. IF you were MOVING IN AN AUTOMOBILE or other vehicle at the time, then complete the following questions:

24.1 What direction were you moving? (Circle One)

a. North

c. East

e. South

g. West

b. Northeast

d. Southeast

f. Southwest

h. Northwest

24.2 How fast were you moving? _____ miles per hour.

24.3 Did you stop at any time while you were looking at the object?

(Circle One) Yes No

25. Did you observe the object through any of the following?

- | | | | | | |
|-----------------|-----|----|----------------|-----|----|
| a. Eyeglasses | Yes | No | e. Binoculars | Yes | No |
| b. Sun glasses | Yes | No | f. Telescope | Yes | No |
| c. Windshield | Yes | No | g. Theodolite | Yes | No |
| d. Window glass | Yes | No | h. Other _____ | | |

26. In order that you can give as clear a picture as possible of what you saw, describe in your own words a common object or objects which, when placed up in the sky, would give the same appearance as the object which you saw.

A large black, full moon, about 4-5 degrees